

Cyanoacrylate Hepatic Pseudotumor: Role of Fine Needle Aspiration

To the Editors:

Gastric varicose veins are generally unresponsive to standard endoscopic treatment. for that reason the

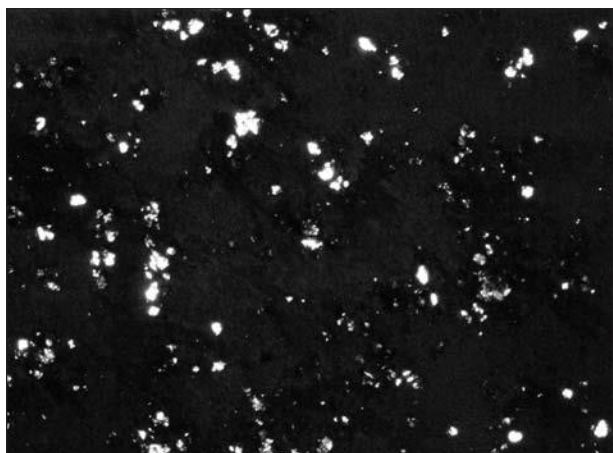


Figure 1 Group of hepatocytes near cyanoacrylate crystals (Papanicolaou stain, $\times 200$).

glue tissue adhesive n-butyl 2-cyanoacrylate is widely employed. This adhesive closes the hole in the vessel. Long-term prevention of rebleeding has been well documented in randomized, controlled studies.¹

Cyanoacrylate injection causes hemostasis in almost 100% of patients, with a rebleeding rate of only 5%.²

Complications from using cyanoacrylate after gastric vessel obliteration are rare and include dysphagia with and without stenosis, bacteremia and pyremia,³

multiple pulmonary glue emboli,⁴ and portal and splenic thrombosis.⁵ The only reported case is below and involved a hepatic tumor produced after injection of gastric, bleeding varicose veins with cyanoacrylate.

A 67-year-old woman had a diagnosis of chronic hepatopathy clinically consistent with hepatic cirrhosis.



Figure 2 Cyanoacrylate crystals, birefringent under polarized light (Papanicolaou stain, $\times 40$).

α -fetoprotein was normal. The patient had seen a physician because of an episode of digestive hemorrhage and was treated with somatostatin and a cyanoacrylate injection. The treatment was satisfactory, with no bleeding. On routine echography, a 1.5-mm-diameter, space-occupying lesion was detected in the right hepatic lobe. Fine needle aspiration biopsy was done with echographic guidance. The fixed cytologic smears were stained with Papanicolaou stain. They contained a mixture of hepatocytes, bile epithelium and mesothelium with no abnormalities admixed with irregularly arranged crystalline structures; their size ranged from 50 to 1,750 μm (Figure 1), and they were birefringent under polarized light (Figure 2).

The morphology of the crystalline structures was identical to that of structures observed when smearing commercial cyanoacrylate mixed with saline fluid. The cyanoacrylate crystal liver deposits presumably migrated through the portal venous system.

Fine needle aspiration is an appropriate tool to establish the diagnosis of hepatic cyanoacrylate deposits.

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